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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Lewis *et al.*

SERIAL NO: 10/073,720

: ART UNIT: 1741

FILED: February 11, 2002

: EXAMINER: Boss, Wendy L.

FOR: Carbon Fiber Binder Pitch

Asst. Commissioner for Patents  
Washington, D.C. 20231

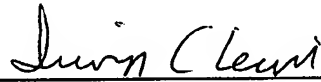
I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASST. COMMISSIONER FOR PATENTS AND TRADEMARKS, WASHINGTON D.C. 20231 ON THIS 17<sup>th</sup> DAY OF December 2002. BY: Carnie A. McPherson

**DECLARATION OF IRWIN C. LEWIS UNDER 37 C.F.R. 1.132**

1. I, Irwin C. Lewis, am one of the named inventors in the above captioned matter.
2. In 1953 I in earned a Bachelor of Science degree from City College of New York, N.Y. in Chemistry.
3. In 1957 I in earned a doctorate of science degree from the University of Kansas in Lawrence Kansas in Organic Chemistry.
4. Completed my education as a Post Doctorate Associate in Physical Organic Chemistry at Penn. State University, State College, Pa.
5. In 1960 I started working for Union Carbide Corporation in areas of carbon and graphite science in their electrode business as a research scientist. During my career in the science of carbon and graphite, I have held many technical positions including being promoted to the position of Corporate Fellow in 1982 and the highest R&D technical position of Senior Corporate Fellow in 1989 for the aforementioned corporation and its successors in interest.
6. As part of my duties as an inventor in the above captioned matter for the assignee, I reviewed the paper designated paper number 6 in this matter and the cited references.

7. The U.S. Patent Number 5,993,905, refers to a low-density preform containing 4 volume percent of fibers and 20 volume percent of graphite particle matrix. These are the only two materials cited of the composite, with the remaining volume of the composite being air. Therefore, the ratio of fibers to matrix is 4:20, in other words, the fibers constitute 25% by volume of the composite material. Given the fact that the densities of the fiber and the resin matrix are comparable, the weight percent of fiber in the composite will be 25%. Furthermore the impregnation, mechanical compaction process described in the invention would lead to intertwined and not individually dispersed fibers in the composite.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Irwin C. Lewis